

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

- - - In the Matter of the Application of --)

PUC Docket 2008-0273

PUBLIC UTILITIES COMMISSION)

Instituting a Proceeding to)
Investigate the Implementation)
Of Feed-In Tariffs)
_____)

PUBLIC UTILITIES
COMMISSION

2010 MAR 23 A 10:25

FILED

LIFE OF THE LAND'S
COMMENTS ON THE HECO COMPANIES'
PROPOSED RELIABILITY STANDARDS
&
CERTIFICATE OF SERVICE

HENRY Q CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES

KAT BRADY
VICE PRESIDENT FOR SOCIAL JUSTICE

76 North King Street, Suite 203
Honolulu, HI 96817
phone: 808-533-3454
henry.lifeoftheland@gmail.com

Aloha,

Life of the Land understood that Hawaiian Electric Company ("HECO") was to file a document reflecting how reliability issues would impact Feed-In Tariffs systems.

HECO instead focused on arbitrary caps and anecdotal fears.

Knowing why the utilities have distribution circuits with higher than 60% renewable energy penetration but fearing circuits with renewable energy penetration levels from 10-15% is a mystery.

We incorporate by reference three documents filed in the past two weeks by Life of the Land: (1) Proposed Hawai'i Independent System Operator (2008-0273, dated March 8, 2010); (2) Comments re Reliability Standards Working Group (2008-0273, dated March 15, 2010); and (3) East Oahu Transmission Project (2003-0417, dated March 22, 2010).

Reliability has two interrelated elements: adequacy and security. Adequacy: having adequate resources to handle peak demand Security: having the ability to withstand contingencies (sudden changes) to the system.

HECO: "Reliability is measured across the whole system, not just within transmission systems"¹

"HECO defines reliability as the availability and continuity of electrical service."²

¹ Kamoku-Pukele Revised Final EIS ("KP RFEIS"), page 2-4

² KP RFEIS, Appendix P, Volume 11: HECO Response to LOL Question #126, dated June 15, 2000

“The reliability of a transmission and distribution system is measured as a whole. A transmission system is made up of components that have specific purposes which are all construed to improved reliability. As such, no meaningful conclusions can be drawn from evaluating the reliability of a given “segment” or portion as opposed to the system as a whole.”³

“Because the transmission system is part of the entire system, the entire systems reliability is measures with respect to outage frequency and duration.”⁴

Intermittency equals average load divided by maximum load. Intermittency varies between resources: average solar system (20%), average wind system (40%), average wave system (60%) and within resources: wind: South Point (61%), Kaheawa (40-49%), Hawi (37%). Diversity of resources -- type, size, location -- allow the resulting combination to have a higher combined level of intermittency than any individual components. Comparing the maximum fluctuation (ramping rate) of both the intermittent renewable energy systems and the baseload spinning reserve units is important in establishing reliability.

HECO must show through the preponderance of evidence that small Feed-In Tariffs systems will hurt their system even though the utility plans to bring on-line several large renewable energy systems.

HECO must show why FiT can have a compartmentalized reliability issue.

Since they failed to do that, the Public Utilities Commission should immediately authorize Tier 1 and Tier 2 projects throughout the state, excluding Kauai County.

³ KP RFEIS, HECO Response to LOL Question # 306, dated December 7, 1998

⁴ Kamoku-Pukele Final EIS, HECO Response to LOL Question # 317, dated December 7, 1998

Certificate of Service

I hereby certify that I have this date served a copy by hand delivery of the foregoing LIFE OF THE LAND'S COMMENTS ON THE HECO COMPANIES' PROPOSED RELIABILITY STANDARDS in PUC Docket Number 2008-0273, upon the following parties. I have hand delivered the original and 8 copies to the PUC, and two copies to the Consumer Advocate and e-mailed a copy to each other party listed below.

<p>CARLITO CALIBOSO, CHAIR HAWAII PUBLIC UTILITIES COMMISSION 465 S King St. Suite 103 Honolulu, HI 96813</p> <p>DEAN NISHINA EXECUTIVE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS DIVISION OF CONSUMER ADVOCACY P. O. Box 541 Honolulu, HI 96809</p> <p>DEAN MATSUURA MANAGER REGULATORY AFFAIRS HAWAIIAN ELECTRIC COMPANY, INC. P. O. Box 2750 Honolulu, HI 96840-0001</p> <p>MARKJ. BENNETT, ESQ. DEBORAH DAY EMERSON, ESQ. GREGG J. KINKLEY, ESQ. DEPARTMENT OF THE ATTORNEY GENERAL 425 Queen Street Honolulu, HI 96813</p> <p>Counsel for DBEDT</p> <p>CARRIE K.S. OKINAGA, ESQ. GORDON D. NELSON, ESQ. DEPARTMENT OF THE CORPORATION COUNSEL CITY AND COUNTY OF HONOLULU 530 S. King Street Room 110 Honolulu, HI 96813</p> <p>Counsel for the CITY AND COUNTY OF HONOLULU</p> <p>LINCOLN S.T. ASHIDA, ESQ. WILLIAM V. BRILHANTE, JR., ESQ. MICHAEL J. UDOVIC, ESQ. DEPARTMENT OF THE CORPORATION COUNSEL COUNTY OF HAWAII 101 Aupuni Street, Suite 325 Hilo, HI 96720</p> <p>Counsel for the COUNTY OF HAWAII</p>	<p>CARL FREEDMAN HAIKU DESIGN & ANALYSIS 4234 Hana Hwy. Haiku, HI 96708</p> <p>WARREN S. BOLLMEIER II PRESIDENT HAWAII RENEWABLE ENERGY ALLIANCE 46-040 Konane Place, #3816 Kaneohe, HI 96744</p> <p>DOUGLAS A. CODIGA, ESQ. SCHLACK ITO LOCKWOOD PIPER & ELKIND Topa Financial Center 745 Fort Street, Suite 1500 Honolulu, HI 96813</p> <p>Counsel for BLUE PLANET FOUNDATION</p> <p>MARK DUDA PRESIDENT HAWAII SOLAR ENERGY ASSOCIATION P. O. Box 37070 Honolulu, HI 96837</p> <p>RILEY SAITO THE SOLAR ALLIANCE 73-1294 Awakea Street Kailua-Kona, HI 96740</p> <p>JOEL K. MATSUNAGA HAWAII BIOENERGY, LLC 737 Bishop Street, Suite 1860 Pacific Guardian Center, Mauka Tower Honolulu, HI 96813</p> <p>DANIEL A. KING SEMPRA GENERATION 101 Ash Street. HQ12 San Diego, CA 92101-3017</p> <p>KENT D. MORIHARA, ESQ. KRIS N. NAKAGAWA, ESQ. SANDRA L. WILHIDE, ESQ.</p>
---	---

<p>ERIK W. KVAM CHIEF EXECUTIVE OFFICER ZERO EMISSIONS LEASING LLC 2800 Woodlawn Drive, Suite 131 Honolulu, HI 96822</p> <p>PAMELA ANN JOE SOPOGY INC. 2660 Waiwai Loop Honolulu, HI 96819</p> <p>GERALD A. SUMIDA, ESQ. TIM LUI-KWAN, ESQ. NATHAN C. NELSON, ESQ. CARLSMITH BALL LLP ASB Tower, Suite 2200 1001 Bishop Street Honolulu, HI 96813</p> <p>Counsel for HAWAII HOLDINGS, LLC, dba FIRST WIND HAWAII</p> <p>MORIHARA LAU & FONG LLP 841 Bishop Street, Suite 400 Honolulu, HI 96813</p> <p>Counsel for MAUI LAND & PINEAPPLE COMPANY, INC.</p>	<p>CHRIS MENTZEL CHIEF EXECUTIVE OFFICER CLEAN ENERGY MAUI LLC 619 Kupulau Dr. Kihei, HI 96753</p> <p>HARLAN Y. KIMURA, ESQ. Central Pacific Plaza 220 South King Street, Suite 1660 Honolulu, HI 96813</p> <p>Counsel for TAWHIRI POWER LLC</p> <p>SANDRA-ANN Y.H. WONG, ESQ. ATTORNEY AT LAW, A LAW CORPORATION 1050 Bishop Street, #514 Honolulu, HI 96813</p> <p>Counsel for ALEXANDER & BALDWIN, INC. through its division, HAWAIIAN COMMERCIAL & SUGAR COMPANY</p>
--	--

March 23, 2010, Honolulu, HI 96817

HENRY Q CURTIS
VICE PRESIDENR FOR CONSUMER ISSUES